## Virginia Division of Consolidated Laboratory Services (DCLS) LABORATORY CERTIFICATION/ACCREDITATION PROGRAMS (1VAC30-41, 1VAC30-45, and 1VAC30-46)

## INFORMATION NOTICE CONCERNING CLEAN WATER ACT METHODS UPDATE RULE (MUR) 2021 AND RECENT DRINKING WATER EXPEDITED METHOD APPROVALS September 12, 2022

The US Environmental Protection Agency (EPA) has published a revised Clean Water Act (CWA) Methods Update Rule (MUR). The MUR adds new methods, which may be used for CWA compliance, and removes and replaces methods with only the most current revision of the publisher's method. The MUR parallels recent Drinking Water Expedited Method Approvals published at Appendix A to Subpart C of 40 CFR Part 141, which approved many of the same methods.

The Virginia Environmental Laboratory Accreditation Program (VELAP) will **require** updates to method revisions in accordance with the MUR at a future date, referred to as the 2021 MUR Implementation Date. The MUR Implementation Date will be announced once it is established. These future updates are in accordance with:

- The CWA 2021 MUR and
- Recent Drinking Water Expedited Method Approvals located at <u>Appendix A to</u> Subpart C of 40 CFR Part 141

A list of methods associated with this MUR is in Table 1 below.

Virginia's Department of Environmental Quality (DEQ) will accept use of revised methods, as listed in Table 1, for Clean Water Act compliance in advance of the 2021 MUR Implementation Date. Drinking water methods approved at Appendix A to Subpart C of 40 CFR 141 are acceptable for Safe Drinking Water Act compliance.

To use the revised methods before the 2021 MUR Implementation Date, laboratories may request a change in scope by submitting a Request for Early MUR Transition, VELAP Form #46015, along with a Standard Operating Procedure demonstrating compliance with the latest approved revision. The form is available on <a href="the VELAP">the VELAP</a> webpage. This is an abbreviated change in scope procedure for the updates listed in Table 1 only. This abbreviated procedure omits requirements for proficiency testing and demonstration of capability based on the similarity of the method revision to the currently certified/accredited method. Fees for the change in scope processing will not be required. A revised certificate will be issued by VELAP after review of the SOP and resolution of any concerns.

When the 2021 MUR Implementation Date is established and announced, VELAP will provide revised instructions for this update process. Submission of the SOP and VELAP Form #46015 will not be required for updates made after the implementation date is established and announced.

Laboratories with secondary accreditation under 1VAC30-46 need to only submit Form #46015 and the current primary certificate supporting the change in scope request.

Laboratories that use a method for testing of both non-potable water samples and drinking water samples are encouraged to make simultaneous updates to testing for both matrices, whenever the method is approved for both matrices.

Laboratories seeking to add methods not currently on the laboratory's certificate to their scope of certification or accreditation may do so by contacting the Laboratory Certification Office for information on how to request a change in scope. Fees apply for changes made in this manner.

Questions may be directed to: <u>Lab Cert@dgs.virginia.gov</u>.

## TABLE 1

TABLE 1 IS A SUMMARY OF METHODS BEING UPDATED IN THE VELAP DATABASE UPON FULL IMPLEMENTATION OF THE 2021 CLEAN WATER ACT METHODS UPDATE RULE (MUR). ALL MATRICES IN THE VELAP DATABASE WILL BE UPDATED FOR THESE METHODS WHEN THE MUR IS FULLY IMPLEMENTED IN VIRGINIA. THE DATE FOR FULL IMPLMEMENTATION WILL BE ANNOUNCED.

METHOD (OLD)	METHOD (NEW)	ANALYTES
ASTM D1067-11 2011	ASTM D1067-16	Alkalinity as CaCO3
ASTM D1126-12	ASTM D1126-17	Total Hardness as CaCO3
ASTM D1426-08 (A) (AS HACH 8038)	ASTM D1426-15 (A) (AS HACH 8038)	Ammonia as N
ASTM D1687-12 (A)	ASTM D1687-17 (A)	Chromium VI
ASTM D3590-11 (A)	ASTM D3590-17 (A)	Kjeldahl Nitrogen, Total (TKN)
ASTM D3590-11 MINUS SM4500-NH3	ASTM D3590-17 MINUS SM4500-NH3	Organic Nitrogen
ASTM D4282-02	ASTM D4282-15	Cyanide, Free
ASTM D4327-03	ASTM D4327-17	Bromide; Chloride; Fluoride; Nitrate as N; Sulfate
ASTM D516-11	ASTM D516-16	Sulfate
ASTM D516-11 (AS HACH 8051)	ASTM D516-16 (AS HACH 8051)	Sulfate
ASTM D516-11 (AS SEAL EPA- 165-A)	ASTM D516-16 (AS SEAL EPA- 165-A)	Sulfate
ASTM D5174-97	ASTM D5174-07	Uranium
ASTM D6919-09	ASTM D6919-17	Ammonia as N
ASTM D6919-09	ASTM D6919-17	Calcium; Magnesium; Potassium; Sodium
ASTM D7065-11	ASTM D7065-17	Nonylphenol
ASTM D7237-10	ASTM D7237-15 (A)	Cyanide, Free
ASTM D7511-12	ASTM D7511-12(17)	Cyanide, Total
SM 2540 B 2011	SM 2540 B 2015	Residue, Total
SM 2540 C 2011	SM 2540 C 2015	Residue, Filterable (TDS)
SM 2540 D 2011	SM 2540 D 2015	Residue, Nonfilterable (TSS)

SM 2540 E 2011         SM 2540 E 2015         Suspended Solids           SM 2540 F 2011         SM 2540 F 2015         Residue, Settleable           SM 4500 CN C 2011         SM 4500 CN C 2016         Cyanide, Total - prep           SM 4500 CN E 2011         SM 4500 CN E 2016         Cyanide, Total           SM 4500 CN F 2011         SM 4500 CN G 2016         Cyanide, Total           SM 4500 CN G 2011         SM 4500 CN G 2016         Cyanide, Available           SM 4500 NO3 D 2011         SM 4500 NO3 D 2016         Nitrate as N           SM 4500 NO3 E 2011         SM 4500 NO3 D 2016         Nitrate as N           SM 4500 NO3 F 2011         SM 4500 NO3 F 2016         Nitrate as N           SM 4500 NO3 F 2011         SM 4500 NO3 F 2016         Nitrate as N           SM 4500 NO3 F 2011         SM 4500 NO3 F 2016         Nitrate-Nitrite           SM 4500 NO3 F 2011         SM 4500 NO3 F 2016         Nitrate-Nitrite           SM 4500 NO3 F 2011 (AS         ASTORIA A173)         Nitrate-Nitrite           SM 4500 NO3 F 2011 (MINUS         SM 4500 NO3 F 2016 MINUS         Nitrate as N           SM 4500 NO3 F 2011 MINUS         SM 4500 NO3 F 2016 MINUS         Nitrate as N           SM 4500 NO3 F 2011 MINUS         SM 4500 NO3 F 2016 MINUS         Nitrate as N           SM 4500 NO3 F 2011 MINUS			5
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SM 4500-NO2 B 2011 (CALC)       SM 4500-NO2 B-2011 CALC       Nitrate as N         SM 4500 NO3 H 2011       SM 4500 NO3 H 2016       Nitrate-Nitrite         SM 4500 O G 2011       SM 4500 O G 2016       Oxygen, Dissolved (DO)         SM 5210 B 2011       SM 5210 B 2016       Biochemical Oxygen Demand (BOD)         SM 5210 B 2011       SM 5210 B 2016       Oxygen Demand (CBOD)         SM 5310 B 2011       SM 5310 B 2014       Organic Carbon (DOC) [DW only]         SM 5310 B 2011       SM 5310 B 2014       Organic Carbon, Total (TOC)         SM 5310 C 2011       SM 5310 C 2014       Organic Carbon, Total (TOC)         SM 5310 C 2011       SM 5310 C 2014       Organic Carbon, Total (TOC)         SM 9221 B 2006       SM 9221 B 2014       Total Coliforms         SM 9221 D 1999 [DW only]       SM 9221 D 2014 [DW only]       Total Coliforms         SM 9221 E 2006 (E+C)       SM 9221 E 2014       Fecal Coliform         SM 9221 F 2006       SM 9221 F 2014       Escherichia coli	EPA 353.2	EPA 353.2	Nitrate as N
SM 4500-NO2 B 2011 (CALC)       SM 4500-NO2 B-2011 CALC       Nitrate as N         SM 4500 NO3 H 2011       SM 4500 NO3 H 2016       Nitrate-Nitrite         SM 4500 O G 2011       SM 4500 O G 2016       Oxygen, Dissolved (DO)         SM 5210 B 2011       SM 5210 B 2016       Demand (BOD)         SM 5210 B 2011       SM 5210 B 2016       Oxygen Demand (CBOD)         SM 5310 B 2011       SM 5310 B 2014       Organic Carbon (DOC) [DW only]         SM 5310 B 2011       SM 5310 B 2014       Organic Carbon, Total (TOC)         SM 5310 C 2011       SM 5310 C 2014       Organic Carbon, Total (TOC)         SM 5310 C 2011       SM 5310 C 2014       Organic Carbon, Total (TOC)         SM 9221 B 2006       SM 9221 B 2014       Total Coliforms         SM 9221 D 1999 [DW only]       SM 9221 D 2014 [DW only]       Total Coliforms         SM 9221 E 2006 (E+C)       SM 9221 E 2014       Fecal Coliform         SM 9221 F 2006       SM 9221 F 2014       Escherichia coli			
SM 4500 NO3 H 2011       SM 4500 NO3 H 2016       Nitrate-Nitrite         SM 4500 O G 2011       SM 4500 O G 2016       Oxygen, Dissolved (DO)         Biochemical Oxygen       Biochemical Oxygen         Demand (BOD)       Carbonaceous Biochemical         SM 5210 B 2011       SM 5210 B 2016       Oxygen Demand (CBOD)         Dissolved Organic Carbon       (DOC) [DW only]         SM 5310 B 2011       SM 5310 B 2014       Organic Carbon, Total (TOC)         SM 5310 C 2011       SM 5310 C 2014       Organic Carbon, Total (TOC)         SM 5310 C 2011       SM 5310 C 2014       Organic Carbon, Total (TOC)         SM 9221 B 2006       SM 9221 B 2014       Total Coliforms         SM 9221 D 1999 [DW only]       SM 9221 D 2014 [DW only]       Total Coliforms         SM 9221 E 2006 (E+C)       SM 9221 E 2014       Fecal Coliform         SM 9221 F 2014       Escherichia coli	SM 4500 NO3 F 2011 MINUS	SM 4500 NO3 F 2016 MINUS	
SM 4500 O G 2011       SM 4500 O G 2016       Oxygen, Dissolved (DO)         SM 5210 B 2011       SM 5210 B 2016       Biochemical Oxygen Demand (BOD)         SM 5210 B 2011       SM 5210 B 2016       Carbonaceous Biochemical Oxygen Demand (CBOD)         SM 5210 B 2011       SM 5210 B 2014       Oxygen Demand (CBOD)         SM 5310 B 2011       SM 5310 B 2014       Organic Carbon, Total (TOC)         SM 5310 C 2011       SM 5310 C 2014       Organic Carbon, Total (TOC)         SM 5310 C 2011       SM 5310 C 2014       Organic Carbon, Total (TOC)         SM 9221 B 2006       SM 9221 B 2014       Total Coliforms         SM 9221 D 1999 [DW only]       SM 9221 D 2014 [DW only]       Total Coliforms         SM 9221 E 2006 (E+C)       SM 9221 E 2014       Fecal Coliform         SM 9221 F 2006       SM 9221 F 2014       Escherichia coli	SM 4500-NO2 B 2011 (CALC)	SM 4500-NO2 B-2011 CALC	Nitrate as N
SM 5210 B 2011   SM 5210 B 2016   Demand (BOD)	SM 4500 NO3 H 2011	SM 4500 NO3 H 2016	Nitrate-Nitrite
SM 5210 B 2011         SM 5210 B 2016         Demand (BOD)           SM 5210 B 2011         SM 5210 B 2016         Carbonaceous Biochemical Oxygen Demand (CBOD)           SM 5210 B 2011         SM 5210 B 2014         Dissolved Organic Carbon (DOC) [DW only]           SM 5310 B 2011         SM 5310 B 2014         Organic Carbon, Total (TOC)           SM 5310 C 2011         SM 5310 C 2014         Dissolved Organic Carbon (DOC) [DW only]           SM 5310 C 2011         SM 5310 C 2014         Organic Carbon, Total (TOC)           SM 9221 B 2006         SM 9221 B 2014         Total Coliforms           SM 9221 D 1999 [DW only]         SM 9221 D 2014 [DW only]         Total Coliforms           SM 9221 E 2006 (E+C)         SM 9221 E 2014         Fecal Coliform           SM 9221 F 2006         SM 9221 F 2014         Escherichia coli	SM 4500 O G 2011	SM 4500 O G 2016	Oxygen, Dissolved (DO)
Carbonaceous Biochemical Oxygen Demand (CBOD)  Dissolved Organic Carbon (DOC) [DW only]  SM 5310 B 2011  SM 5310 B 2014  Organic Carbon, Total (TOC)  Dissolved Organic Carbon (DOC) [DW only]  SM 5310 C 2011  SM 5310 C 2014  Organic Carbon, Total (TOC)  Dissolved Organic Carbon (DOC) [DW only]  SM 5310 C 2011  SM 5310 C 2014  Organic Carbon, Total (TOC)  SM 9221 B 2006  SM 9221 B 2014  Total Coliforms  SM 9221 D 1999 [DW only]  SM 9221 D 2014 [DW only]  Total Coliforms  SM 9221 E 2006 (E+C)  SM 9221 F 2014  Escherichia coli			Biochemical Oxygen
SM 5210 B 2011       SM 5210 B 2016       Oxygen Demand (CBOD)         SM 5310 B 2011       SM 5310 B 2014       Dissolved Organic Carbon (DOC) [DW only]         SM 5310 B 2011       SM 5310 B 2014       Organic Carbon, Total (TOC)         SM 5310 C 2011       SM 5310 C 2014       Dissolved Organic Carbon (DOC) [DW only]         SM 5310 C 2011       SM 5310 C 2014       Organic Carbon, Total (TOC)         SM 9221 B 2006       SM 9221 B 2014       Total Coliforms         SM 9221 D 1999 [DW only]       SM 9221 D 2014 [DW only]       Total Coliforms         SM 9221 E 2006 (E+C)       SM 9221 E 2014       Fecal Coliform         SM 9221 F 2006       SM 9221 F 2014       Escherichia coli	SM 5210 B 2011	SM 5210 B 2016	Demand (BOD)
SM 5310 B 2011       SM 5310 B 2014       Dissolved Organic Carbon (DOC) [DW only]         SM 5310 B 2011       SM 5310 B 2014       Organic Carbon, Total (TOC)         SM 5310 C 2011       SM 5310 C 2014       Dissolved Organic Carbon (DOC) [DW only]         SM 5310 C 2011       SM 5310 C 2014       Organic Carbon, Total (TOC)         SM 9221 B 2006       SM 9221 B 2014       Total Coliforms         SM 9221 D 1999 [DW only]       SM 9221 D 2014 [DW only]       Total Coliforms         SM 9221 E 2006 (E+C)       SM 9221 E 2014       Fecal Coliform         SM 9221 F 2006       SM 9221 F 2014       Escherichia coli			Carbonaceous Biochemical
SM 5310 B 2011       SM 5310 B 2014       (DOC) [DW only]         SM 5310 B 2011       SM 5310 B 2014       Organic Carbon, Total (TOC)         SM 5310 C 2011       SM 5310 C 2014       Dissolved Organic Carbon (DOC) [DW only]         SM 5310 C 2011       SM 5310 C 2014       Organic Carbon, Total (TOC)         SM 9221 B 2006       SM 9221 B 2014       Total Coliforms         SM 9221 D 1999 [DW only]       SM 9221 D 2014 [DW only]       Total Coliforms         SM 9221 E 2006 (E+C)       SM 9221 E 2014       Fecal Coliform         SM 9221 F 2006       SM 9221 F 2014       Escherichia coli	SM 5210 B 2011	SM 5210 B 2016	Oxygen Demand (CBOD)
SM 5310 B 2011       SM 5310 B 2014       Organic Carbon, Total (TOC)         SM 5310 C 2011       SM 5310 C 2014       Dissolved Organic Carbon (DOC) [DW only]         SM 5310 C 2011       SM 5310 C 2014       Organic Carbon, Total (TOC)         SM 9221 B 2006       SM 9221 B 2014       Total Coliforms         SM 9221 D 1999 [DW only]       SM 9221 D 2014 [DW only]       Total Coliforms         SM 9221 E 2006 (E+C)       SM 9221 E 2014       Fecal Coliform         SM 9221 F 2006       SM 9221 F 2014       Escherichia coli			Dissolved Organic Carbon
SM 5310 C 2011       SM 5310 C 2014       Dissolved Organic Carbon (DOC) [DW only]         SM 5310 C 2011       SM 5310 C 2014       Organic Carbon, Total (TOC)         SM 9221 B 2006       SM 9221 B 2014       Total Coliforms         SM 9221 D 1999 [DW only]       SM 9221 D 2014 [DW only]       Total Coliforms         SM 9221 E 2006 (E+C)       SM 9221 E 2014       Fecal Coliform         SM 9221 F 2006       SM 9221 F 2014       Escherichia coli	SM 5310 B 2011	SM 5310 B 2014	(DOC) [DW only]
SM 5310 C 2011       SM 5310 C 2014       Dissolved Organic Carbon (DOC) [DW only]         SM 5310 C 2011       SM 5310 C 2014       Organic Carbon, Total (TOC)         SM 9221 B 2006       SM 9221 B 2014       Total Coliforms         SM 9221 D 1999 [DW only]       SM 9221 D 2014 [DW only]       Total Coliforms         SM 9221 E 2006 (E+C)       SM 9221 E 2014       Fecal Coliform         SM 9221 F 2006       SM 9221 F 2014       Escherichia coli			
SM 5310 C 2011       SM 5310 C 2014       (DOC) [DW only]         SM 5310 C 2011       SM 5310 C 2014       Organic Carbon, Total (TOC)         SM 9221 B 2006       SM 9221 B 2014       Total Coliforms         SM 9221 D 1999 [DW only]       SM 9221 D 2014 [DW only]       Total Coliforms         SM 9221 E 2006 (E+C)       SM 9221 E 2014       Fecal Coliform         SM 9221 F 2006       SM 9221 F 2014       Escherichia coli	SM 5310 B 2011	SM 5310 B 2014	Organic Carbon, Total (TOC)
SM 5310 C 2011       SM 5310 C 2014       Organic Carbon, Total (TOC)         SM 9221 B 2006       SM 9221 B 2014       Total Coliforms         SM 9221 D 1999 [DW only]       SM 9221 D 2014 [DW only]       Total Coliforms         SM 9221 E 2006 (E+C)       SM 9221 E 2014       Fecal Coliform         SM 9221 F 2006       SM 9221 F 2014       Escherichia coli			Dissolved Organic Carbon
SM 9221 B 2006       SM 9221 B 2014       Total Coliforms         SM 9221 D 1999 [DW only]       SM 9221 D 2014 [DW only]       Total Coliforms         SM 9221 E 2006 (E+C)       SM 9221 E 2014       Fecal Coliform         SM 9221 F 2006       SM 9221 F 2014       Escherichia coli	SM 5310 C 2011	SM 5310 C 2014	(DOC) [DW only]
SM 9221 B 2006       SM 9221 B 2014       Total Coliforms         SM 9221 D 1999 [DW only]       SM 9221 D 2014 [DW only]       Total Coliforms         SM 9221 E 2006 (E+C)       SM 9221 E 2014       Fecal Coliform         SM 9221 F 2006       SM 9221 F 2014       Escherichia coli			
SM 9221 D 1999 [DW only]       SM 9221 D 2014 [DW only]       Total Coliforms         SM 9221 E 2006 (E+C)       SM 9221 E 2014       Fecal Coliform         SM 9221 F 2006       SM 9221 F 2014       Escherichia coli	SM 5310 C 2011	SM 5310 C 2014	Organic Carbon, Total (TOC)
SM 9221 E 2006 (E+C)       SM 9221 E 2014       Fecal Coliform         SM 9221 F 2006       SM 9221 F 2014       Escherichia coli	SM 9221 B 2006	SM 9221 B 2014	Total Coliforms
SM 9221 F 2006 SM 9221 F 2014 Escherichia coli	SM 9221 D 1999 [DW only]	SM 9221 D 2014 [DW only]	Total Coliforms
	SM 9221 E 2006 (E+C)	SM 9221 E 2014	Fecal Coliform
SM 9222 B 1997 SM 9222 B 2015 Total Coliforms [DW only]	SM 9221 F 2006	SM 9221 F 2014	Escherichia coli
Sitt 5222 b 2015 Total Comornia [bw only]	SM 9222 B 1997	SM 9222 B 2015	Total Coliforms [DW only]
SM 9222 D 2006 SM 9222 D 2015 Fecal Coliform	SM 9222 D 2006	SM 9222 D 2015	Fecal Coliform